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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,354	12/27/2000	Stuart I. Hodge JR.	786-009917-US (PAR)	5467

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PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06430

EXAMINER
LAXTON, GARY L

ART UNIT	PAPER NUMBER
2838	

DATE MAILED: 05/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/749,354	HODGE, STUART I.	
	Examiner	Art Unit	
	Gary L. Laxton	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 13-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 13-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 December 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to because it is unclear which conductors are connected with what other conductors since there are no connection nodes indicated nor are there any jump connections. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

It is unclear by the connections in the drawings whether the gate driver is connected to the controller.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by admitted prior art reference Katyl et al.

Katyl et al disclose an active power factor correction circuit and an inrush current control circuit driven by the same controller; see figure 2. Furthermore, the inrush circuit comprises at least one passive device.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art reference Katyl et al.

Claim 2:
Katyl et al discloses the claimed invention with regard to claim 1 as stated above except for wherein the inrush current control circuit comprises an IGBT.
Katyl et al teach using a MOSFET. It is well known in the art and certainly not beyond the skill of those ordinarily skilled in the art to substitute one switching device with or for another switching device in order to enhance switching efficiency of the circuit or to reduce switching losses given the characteristics of different switches. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an IGBT in place of the MOSFET of Katyl et al in order to reduce switching losses.

Claim 3:
Katyl et al discloses the claimed invention with regard to claim 1 as stated above except for using a UC3854 controller. It's well known that those skilled in the art choose appropriate controllers to perform specified functions and it would not have been beyond those ordinarily skilled in the art to choose a UC3854 controller. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a UC3854 controller

in order to carry out the functions and operations of the circuit of Katyl et al in order to produce a regulated power supply with power factor correction and inrush current protection.

Claims 4-6:
However, Katyl et al do not disclose the different types of driver circuits as claimed.
Driver circuits with charge pumps, power amps, or high voltage integrated circuits, etc. are well known and obvious substitutes. See previously cited reference Inn et al for support for the driver circuits.

7. Claims 8-11 and 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art reference Katyl et al in combination with Bernstein et al.

Katyl et al disclose an active power factor correction circuit and an inrush current control circuit driven by the same controller; see figure 2.
However, Katyl et al do not disclose actively controlling the inrush current by shunting current around a passive device and through an active device.
Bernstein et al teach the benefits of actively controlling inrush current by shunting current around a passive device and through an active device by utilizing an IGBT to actively control the inrush current. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the apparatus of Bernstein et al for controlling inrush current in the circuit of Katyl et al in order to keep a temperature sensitive thermistor in a cold state in order to maintain high resistance to effectively and efficiently control inrush current.
Furthermore, Bernstein teaches charging a capacitor 22. Furthermore, Bernstein et al disclose a drive circuit. Still further, utilizing over-current protection is highly desired and is an obvious benefit to any switching power supply.
However, Katyl et al in combination with Bernstein et al do not disclose the different types of driver circuits as claimed.
Driver circuits with charge pumps, power amps, or high voltage integrated circuits are well known and obvious substitutes. See previously cited reference Inn et al for support for the driver circuits.

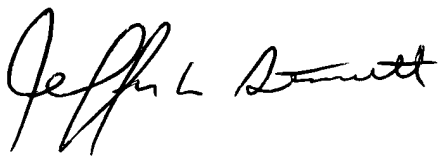
Response to Arguments

8. Applicant's arguments with respect to claims 1-11 and 13-22 which are pending have been considered but are moot in view of the new ground(s) of rejection.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (703) 305-7039. The examiner can normally be reached on 5-4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on (703) 308-3370. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Jeffrey Sterrett
Primary Examiner

GLL
May 21, 2002